



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,875	06/06/2000	Shekhar Kirani	LS/0003.01	1069

JUDITH A. SZEPESE  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025

EXAMINER

ENGLAND, DAVID E

ART UNIT PAPER NUMBER

2143

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/588,875

Applicant(s)

KIRANI ET AL.

Examiner

David E. England

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 12, 14 - 19, 22 - 29, 31 - 36, 38 - 44 and 46 - 70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 12, 14 - 19, 22 - 29, 31 - 36, 38 - 44 and 46 - 70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 – 12, 14 – 19, 22 – 29, 31 – 36, 38 – 44 and 46 – 70 are presented for examination.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 12, 14 – 19, 22 – 29, 31 – 36, 38 – 44 and 46 – 70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 36 state the limitation of “media format” yet there is no definition as to the difference from “format” to the amended limitation of “media format”. Applicant is asked to further amend or explain, while pointing to sections of the specification, what is specifically meant by the limitation of “media format”.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2143

5. Claim 67 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The limitation of “the cache lookup logic” is not stated in the specification in a manner to give one of ordinary skill in the art the ability to determine what specifically is meant by the word “logic” when used in the limitation of “cache lookup logic”.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 – 5, 7, 9, 11, 12, 14 – 19, 24 – 27, 31, 32, 36, 38 – 43, 46 – 53, 56 – 59, 62, 63 and 67 – 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (6438576) (hereinafter Huang) in view of Stewart et al. (6389460) (hereinafter Stewart).

9. Referencing claim 1, as closely interpreted by the Examiner, Huang teaches in an online system, a method for providing digital photographic images to target devices, the method comprising:

Art Unit: 2143

10. receiving a request to provide a target device with a copy of a particular photographic image, (e.g. col. 10, line 20 – col. 11, line 5);
11. determining capabilities of the target device, (e.g. col. 10, line 20 – col. 11, line 5);
12. based on the capabilities of the target device, determining a media format that is desired for providing the target device with a copy of the particular photographic image, (e.g. col. 10, line 20 – col. 11, line 5);
13. if a cached copy exists, providing the target device with the cached copy of the particular photographic image and thereafter terminating the method, (e.g. col. 7, line 23 – col. 8, line 10 & col. 10, line 20 – col. 11, line 5);
14. if a cached copy does not exist, translating the particular photographic image into a copy having said determined format, (e.g. col. 7, line 23 – col. 8, line 10 & col. 10, line 20 – col. 11, line 5); and
15. providing the target device with the copy having said determined format, (e.g. col. 7, line 23 – col. 8, line 10 & col. 10, line 20 – col. 11, line 5).
16. Huang does not specifically teach generating a cache lookup key based on the identity of the particular photographic image and the format specified by the target device;
17. determining whether a cached copy of the particular photographic image already exists in said determined media format using the cache lookup key.
18. Stewart also teaches based on the capabilities of the target device, determining a media format that is desired for providing the target device with a copy of the particular photographic image, (e.g. col. 2, line 46 – col. 3, line 20 & col. 11, lines 1 – 12, “*image type*”);

Art Unit: 2143

19. generating a cache lookup key based on the identity of the particular photographic image and the media format specified by the target device, (e.g. col. 11, lines 1 – 25);
20. determining whether a cached copy of the particular photographic image already exists in said determined media format using the cache lookup key, (e.g. col. 11, lines 1 – 25 & col. 15, lines 1 – 17 “*block 412*”);
21. if a cached copy does not exist, translating the particular photographic image into a copy having said determined media format, (e.g. col. 2, line 46 – col. 3, line 20 & col. 11, lines 1 – 12, “*image type*”); and
22. providing the target device with the copy having said determined media format, (e.g. col. 2, line 46 – col. 3, line 20 & col. 11, lines 1 – 12, “*image type*”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Stewart with Huang because it would be more convenient for a system to utilize a widely know technique of data storage such as indexing or otherwise known as a lookup key to retrieve commonly used files from a system. Furthermore, all files that are save in an area will have the extension of the file that designates what format the file is, (example: photo.jpeg, document.txt, movie.mpeg, etc.).
23. It is recommended that the Applicant be more specific in this area to overcome the rejection as stated above using more descriptive language on how the generating occurs and what specifically is used in the generation.

Art Unit: 2143

24. Referencing claim 2, as closely interpreted by the Examiner, Huang teaches storing the copy having said determined format in a cache memory, (e.g. col. 7, line 23 – col. 8, line 10 & col. 10, line 20 – col. 11, line 5).

25. Referencing claim 3, as closely interpreted by the Examiner, Huang teaches receiving from the target device a subsequent request for the particular photographic image, (e.g. col. 6, lines 39 – 67 & col. 11, lines 15 – 55); and

26. providing the target device with the copy stored in said cache memory, (e.g. col. 6, lines 39 – 67 & col. 11, lines 15 – 55).

27. Referencing claim 4, as closely interpreted by the Examiner, Huang teaches said request specifies a photographic identifier, (photo ID), (e.g. col. 10, line 20 – col. 11, line 5 & col. 11, lines 15 – 55).

28. Referencing claim 5, as closely interpreted by the Examiner, Huang teaches said photo ID comprises a unique ID created by said online system for identifying photographic images, (e.g. col. 10, line 20 – col. 11, line 5 & col. 11, lines 15 – 55).

29. Referencing claim 9, as closely interpreted by the Examiner, Huang teaches said request specifies a user identifier (user ID), (e.g. col. 10, line 20 – col. 11, line 5 & col. 11, lines 15 – 55).

Art Unit: 2143

30. Referencing claim 11, as closely interpreted by the Examiner, Huang teaches the capabilities of the target device include one or more of the following: screen resolution, screen size, and color support, (e. g. col. 5, line 42 – col. 6, line 4 & col. 11, lines 15 – 56).

31. Referencing claim 14, as closely interpreted by the Examiner, Huang teaches the capabilities of the target device include currently-available communication medium that the target device employs to transmit its request, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

32. Referencing claim 15, as closely interpreted by the Examiner, Huang teaches currently-available communication medium comprises wireless communication, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

33. Referencing claim 16, as closely interpreted by the Examiner, Huang teaches currently-available communication medium comprises wireline communication, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

34. Referencing claim 17, as closely interpreted by the Examiner, Huang teaches said step of determining capabilities of the target device includes: querying the device for its capabilities, (e.g. col. 5, line 42 – col. 6, line 4 & col. 11, lines 15 – 56).



Art Unit: 2143

35. Referencing claim 18, as closely interpreted by the Examiner, Huang teaches said step of determining capabilities of the target device includes: determining capabilities from a knowledgebase, based on a device class for the target device, (e.g. col. 3, line 38 – col. 4, line 7).

36. Referencing claim 19, as closely interpreted by the Examiner, Huang teaches determining a format that is desired comprises on or more of the following: determining an appropriate resolution for rendering the particular photographic image at the target device, (e.g. col. 5, line 42 – col. 6, line 4 & col. 11, lines 15 – 56), determining an appropriate color space for rendering the particular photographic image at the target device, (e.g. col. 5, line 42 – col. 6, line 4 & col. 11, lines 15 – 56), and determining an appropriate image size for rendering the particular photographic image at the target device, (e.g. col. 5, line 42 – col. 6, line 4 & col. 11, lines 15 – 56).

37. Referencing claim 24, as closely interpreted by the Examiner, Huang teaches said target device includes a handheld computing device having display capability, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

38. Referencing claim 25, as closely interpreted by the Examiner, Huang teaches said target device includes a cellular phone device having display capability, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

Art Unit: 2143

39. Referencing claim 26, as closely interpreted by the Examiner, Huang teaches said target device includes a pager device having display capability, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

40. Referencing claim 27, as closely interpreted by the Examiner, Huang teaches said target device includes a personal computer having display capability, (e.g. col. 1, lines 29 – 67 & col. 6, lines 24 – 38).

41. Referencing claim 31, as closely interpreted by the Examiner, Huang teaches based on the capabilities of the target device, determining metadata for the particular photographic image that may be provided to the target device, (e.g. col. 9, line 56 – col. 10, line 45).

42. Referencing claim 32, as closely interpreted by the Examiner, Huang teaches said metadata includes attribute information for the particular photographic image, (e.g. col. 9, line 56 – col. 10, line 45).

43. Claims 7, 36, 38 – 43, 46 – 53, 56 – 59, 62, 63 and 67 – 69 are rejected for similar reasons as stated above.

44. Claims 6 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of Foster et al. (6202097) (hereinafter Foster).

45. As per claim 6, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach said photo ID is created from one or more of the following: and auto-incrementing counter, and a system time stamp. Foster teaches said photo ID is created from one or more of the following: and auto-incrementing counter, and a system time stamp, (e.g. col. 10, lines 25 – 42). It would be obvious to one skilled in the art at the time the invention was made to combine Foster with the combine system of Huang and Stewart because it is common knowledge that if a user desires to save a file that has the same or similar name as an existing file, the program that is saving the file would increment the file name, example, if there is a file named “pic.jpeg” and a user would like to have the same beginning the program would choose the next number, since the number being used is null or 0, which would be “pic1.jpeg”. If this would be a recurring action, then the next file names would be for example, “pic2.jpeg”, “pic3.jpeg”, etc. of similar reasons stated above.

46. Claim 41 is rejected for similar reasons as stated above.

47. Claims 8 and 70 rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of Knight et al. (6289375) (hereinafter Knight).

48. As per claim 8, as closely interpreted by the Examiner, Huang and Stewart teach all that is similar to claim 8 above including cache lookup key using the photo ID and parameters.

Art Unit: 2143

Knight teaches a hash key and hashing using multiple parameters from the target device, (e.g. col. 20, line 38 – col. 21, line 23). It would be obvious to one skilled in the art at the time the invention was made to combine Knight with the combine system of Huang and Stewart because utilizing multiple parameters for hashing could ensure that no intruders can access the information located in a remote device. Furthermore, using parameters taken from the requesting user, i.e. transmission speed, resolution, screen size, ensures that the device that is requesting a image will have a specific type of hash that is unique to that users device, making for a faster and more secure retrieval.

49. Claim 70 is rejected for similar reasons as stated above.

50. Claims 12 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of what is well known in the art.

51. As per claim 12, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach the photographic image is an artwork.

52. Examiner takes Official Notice (see MPEP § 2144.03) that "a photographic image is an artwork" in a computer networking environment was well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to

Art Unit: 2143

the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, In re Boon, 169 USPQ 231, 234 states "as we held in Ahlert, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight. Furthermore, applicant does not disclose what is considered artwork to the Applicant. What could be considered "artwork" to the Applicant could be ugly to the Examiner or any other viewer.

53. Claim 44 is rejected for similar reasons as stated above.

54. Claims 10, 22, 23, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of Jackowski et al. (6141686) (hereinafter Jackowski).

55. As per claim 10, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach said user ID comprises a unique ID created by said online system for identifying users. Jackowski teaches said user ID comprises a unique ID created by said online system for identifying users, (e.g. col. 2, lines 32 – 44). It would be obvious to one skilled in the art at the time the invention was made to combine Foster with the combine system of Huang and

Art Unit: 2143

Stewart because it is common for the Internet/ISP to assign IP addresses to devices that log into the Internet so that hackers and other Internet pirates can not use the same IP address for the same user every time the user logs into the Internet, adding security to a system.

56. As per claim 22, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach determining communication bandwidth available for transmitting a copy of the particular photographic image to the target device. Jackowski teaches determining communication bandwidth available for transmitting a copy of the particular photographic image to the target device, (e.g. col. 2, line 65 – col. 3, line 10). It would be obvious to one skilled in the art at the time the invention was made to combine Foster with the combine system of Huang and Stewart because it would be more efficient for a system to allocate or determine the available bandwidth to a target device so to transmit packets to the target device at a rate that would not cause traffic in the network that the device could not handle, therefore causing errors and bottlenecking.

57. As per claim 23, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach the communication bandwidth available is determined, at least in part, based on a device class for the target device, (e.g. col. 2, line 65 – col. 3, line 10). It would be obvious to one skilled in the art at the time the invention was made to combine Foster with the combine system of Huang and Stewart because of similar reasons as stated above and further, it is well known in the art that the bandwidth and protocol difference between wireless and wireline are different enough that if the system would know at transmission time the difference just from

Art Unit: 2143

sending out a signal to determine if the device exist The return signal to the device that is being transmitted from would have information about the type of protocol the client is using, therefore, knowing what class the device belongs to.

58. Claims 54 and 55 are rejected for similar reasons as stated above.

59. Claims 28 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of the Applicant's admitted prior art.

60. As per claim 28, as closely interpreted by the Examiner, Huang teaches wireless communication but does not specifically teach said target device includes WAP (Wireless Application Protocol) support. Applicant admits in the prior art on page 4 that said target device includes WAP (Wireless Application Protocol) support and is used in Internet communication. It would be obvious to one skilled in the art at the time the invention was made to combine the Applicant with the combine system of Huang and Stewart because it would be more convenient for a system to utilize a widely use wireless protocol in a system as opposed to developing a wireless protocol that is not widely used and would make the invention more difficult to sell to consumers because of the patches and other programs that would have to come with the invention to adapted to the already widely used WAP. Furthermore, adding extra protocol overhead will slow down the transmission of the data.

61. Claim 60 is rejected for similar reasons as stated above.

62. Claims 29, 33 – 35, 61 and 64 – 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6438576) in view of Stewart (6389460) in further view of O’Neal (6411685).

63. As per claim 29, as closely interpreted by the Examiner, Huang and Stewart do not specifically teach said step of determining a format that is desired includes determining user preferences, if any, for rendering images at the target device. O’Neal teaches said step of determining a format that is desired includes determining user preferences, if any, for rendering images at the target device, (e.g. col. 2, lines 20 – 37). It would be obvious to one skilled in the art at the time the invention was made to combine O’Neal with the combine system of Huang and Stewart because it would be more convenient for a system to have the option to save data to a specific format chosen by the user incase the system/device that the user is using does not support a specific format. If the user didn’t have this option the data will be open as “gibberish” because of the lack of functionality of the device.

64. As per claim 33, as closely interpreted by the Examiner, Huang teaches metadata and all that is disclosed above but does not specifically teach said metadata includes annotations for the particular photographic image. O’Neal teaches said metadata includes annotations for the particular photographic image, (e.g. col. 12, line 41 – col. 13, line 22). It would be obvious to one skilled in the art at the time the invention was made to combine O’Neal with the combine system of Huang and Stewart because it would be more convenient for a system to utilize the



Art Unit: 2143

functionality of an annotation, in voice or text, to describe to a viewer what the data is about, and for pictures, what the picture is about or a story that goes with the picture.

65. As per claim 34, as closely interpreted by the Examiner, Huang teaches all that is disclosed above but does not specifically teach said annotations include text data. O'Neal teaches said annotations include text data, (e.g. col. 12, line 41 – col. 13, line 22). It would be obvious to one skilled in the art at the time the invention was made to combine O'Neal with the combine system of Huang and Stewart because it would be more convenient for a system to utilize the functionality of an annotation, in voice or text, to describe to a viewer what the data is about, and for pictures, what the picture is about or a story that goes with the picture.

66. As per claim 35, as closely interpreted by the Examiner, Huang teaches all that is disclosed above but does not specifically teach said annotations include voice data. O'Neal teaches said annotations include voice data, (e.g. col. 12, line 41 – col. 13, line 22). It would be obvious to one skilled in the art at the time the invention was made to combine O'Neal with the combine system of Huang and Stewart because it would be more convenient for a system to utilize the functionality of an annotation, in voice or text, to describe to a viewer what the data is about, and for pictures, what the picture is about or a story that goes with the picture.

67. Claims 61 and 64 – 66 are rejected for similar reasons as stated above.

***Response to Arguments***

Art Unit: 2143

68. Applicant stated on 07/12/2004 that claims 13 and 45 are to be canceled in an After Final Amendment, which was considered and entered. In the most recent copy of claims, claims 13 and 45 are not canceled. Applicant is asked to remedy this oversight by canceling claims 13 and 45 as was entered in the previous After Final Amendment.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England  
Examiner  
Art Unit 2143



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

